

Technical Note
Gross Domestic Product, First Quarter 2003 (Advance)
April 25, 2003

This technical note provides background information about the source data and estimating methods used to produce the estimates presented in the GDP news release; the note also provides some perspective on the estimates. Additional material will be posted to BEA's Web site <www.bea.gov> as it becomes available over the next few days. In a few weeks, the estimates will be published in BEA's monthly journal, the *Survey of Current Business*. The *Survey* also will provide a more detailed analysis of the estimates ("The Business Situation").

Gross Domestic Product

Real GDP: Based on data available at this time, BEA estimates that real GDP increased 1.6 percent (annual rate) in the first quarter of 2003, after increasing 1.4 percent in the fourth quarter of 2002. A downturn in imports, which are a subtraction in the calculation of GDP, was largely offset by downturns in business investment for equipment and software and in inventory investment and a slowdown in government spending.

Real final sales of domestic product, GDP less the change in private inventories, increased 2.1 percent in the first quarter, following an increase of 1.1 percent in the fourth. A decrease in inventory accumulation subtracted 0.48 percentage point from the first-quarter change in GDP. In the fourth quarter, an increase in inventory accumulation had added 0.28 percentage point to the change in GDP.

Operation Iraqi Freedom: The first-quarter estimates reflected the military buildup in the Persian Gulf Region and the first few days of military action in Operation Iraqi Freedom, which began on March 19, 2003. Although the GDP statistics do not separately identify expenditures related to the war, these expenditures are reflected in several components of federal government defense spending. For example, the \$2.5 billion increase in real defense compensation of employees partly reflected the activation of an additional 163,000 military reservists between January 1 and March 31. Spending for the war in Iraq also accounted for increases in transportation of material (\$4.4 billion) and in travel of persons (\$0.6 billion). Spending on munitions, however, is included in GDP when these items are produced and delivered to the military, not when used. Consequently, the use of munitions during the conflict had no direct impact on first-quarter GDP growth. Despite the added spending for Operation Iraqi Freedom, federal defense spending overall fell 1.5 percent in the first quarter following nine consecutive quarters of growth.

Prices: The price index for gross domestic purchases increased 3.6 percent in the first quarter after increasing 1.8 percent in the fourth. Three-fourths of the step-up was due to the jump in energy prices; excluding food and energy prices, the index increased 2.0 percent in the first quarter after increasing 1.5 percent in the fourth. About 0.3 percentage point of the first-quarter increase was accounted for by the pay raise for federal civilian and military personnel, which is treated as an increase in the price of employee services purchased by the federal government.

Disposable personal income and personal saving: Real disposable personal income (DPI) increased 1.1 percent in the first quarter after increasing 2.4 percent in the fourth. The slowdown in real DPI growth mainly reflected the step-up in inflation.

Personal saving -- current-dollar DPI less personal outlays -- was \$297.5 billion in the first

quarter, compared with \$302.5 billion in the fourth. The personal saving rate -- saving as a percentage of DPI -- was 3.7 percent in the first quarter; it was 3.8 percent in the fourth.

Source Data for the Advance Estimate

The advance GDP estimate for the first quarter is based on source data that are incomplete and subject to revision.

Three months of source data were available for consumer spending on goods; investment in private equipment other than aircraft; motor vehicle sales and inventories; manufacturing durables inventories (except semiconductors); federal government outlays; and consumer, producer, and international prices. Only two months of data were available for most other key data sources; BEA's assumptions for the third month are shown in table A.

- C For the change in nondurable manufacturing inventories, an increase was assumed for March.
- C For the change in non-motor-vehicle inventories of retailers and merchant wholesalers, an increase was assumed for March.
- C For exports of goods, excluding gold, a decrease was assumed for March.
- C For imports of goods, excluding gold, an increase was assumed for March.

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April 25, 2003

Table A. KEY ASSUMPTIONS FOR THE ADVANCE ESTIMATE OF GDP
FOR THE FIRST QUARTER OF 2003

For many of the key series used to prepare the advance estimate of GDP, including retail sales, unit automobile and truck sales and inventories, manufacturers' shipments of nondefense capital goods (other than aircraft), manufacturers' inventories of durable goods, federal defense spending, and consumer, producer, and international price indexes, actual data are available for all months of the quarter.

For the key series shown in this table, actual data for the third month of the quarter usually are not available in time for inclusion in the advance GDP estimate. BEA makes assumptions for the source data that are not yet available; assumptions for March 2003 are shown in the last column of the table. For most series shown, the data for February are preliminary and subject to further revision. Occasionally, the data for earlier months are also subject to revision.

All series shown in the table are in billions of dollars, seasonally adjusted at annual rates, and are published by the Bureau of the Census.

	Oct.	2002 Nov.	Dec.	Jan.	2003 Feb.	Mar. *
Private fixed investment:						
Nonresidential structures:						
Buildings:						
1 Value of new nonresidential construction put in place.....	160.2	161.8	155.6	158.3	158.8	158.5
Equipment and software:						
2 Manufacturers' shipments of complete aircraft.....	32.2	31.1	26.6	24.3	33.4	28.8
Residential structures:						
Value of new residential construction put in place:						
3 1-unit structures.....	267.9	273.4	282.0	291.7	291.3	294.1
4 2-unit-or-more.....	31.9	31.4	32.7	35.6	36.8	37.2
Change in private inventories:						
5 Change in inventories for nondurable manufacturing.....	2.0	-3.6	-0.3	9.4	21.6	13.1
5a Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment....	-31.0	18.0	60.8	-0.9	22.7	23.6
Net exports:						
Exports of goods:						
6 U.S. exports of goods, international-transactions-						

	accounts basis.....	687.3	694.1	664.5	681.5	688.9	680.8
6a	Excluding gold.....	683.8	690.2	660.4	677.1	685.1	677.2
Imports of goods:							
7	U.S. imports of goods, international-transactions- accounts basis.....	1162.7	1225.4	1246.6	1221.0	1219.6	1244.5
7a	Excluding gold.....	1159.0	1222.5	1244.4	1218.6	1217.0	1242.1
8	Net exports of goods.....	-475.4	-531.3	-582.1	-539.6	-530.7	-563.6
8a	Excluding gold.....	-475.2	-532.2	-584.0	-541.5	-531.8	-564.8
Government:							
State and local:							
Structures:							
9	Value of new construction put in place.....	186.3	189.9	189.1	192.4	186.1	189.3

*Assumption.